

**From:** McMillin, Stella@Wildlife  
**To:** [County Ag Commissioner, Sonoma](#); [Kratville, David@CDFA](#); [Palmer-Townsend, Marilyn@CDPR](#); [Miller, Robert](#)  
**Subject:** Loss reports for gray foxes in Sonoma County  
**Date:** Friday, July 06, 2018 1:57:09 PM  
**Attachments:** [P3283.pdf](#)  
[P3285.pdf](#)

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Good morning, I have attached two loss reports for separate incidents involving gray foxes in Sonoma County. Please contact me if you have any questions.

Thank you.

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**DEPARTMENT OF FISH AND WILDLIFE**  
**WILDLIFE BRANCH**  
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**Lab Number P-3283**  
**Necropsy Number Z18-0159**  
**CAHFS Number D1806757**

**Date of loss: February 20, 2018**  
**Sample: Gray fox**  
*Urocyon cinereoargenteus*  
**Protection status: No special status**

-001

**To: Tony Linegar**  
**Sonoma County Agricultural Commissioner**

**Report Date: July 5, 2018**

**Remarks**

Loss of gray fox from probable bromethalin intoxication.

**Background**

On February 19, 2018, a gray fox was found lying on its side in Glen Ellen and appeared to have an injured back leg. The fox was brought to Sonoma County Wildlife Rescue. Upon admission, the fox displayed nystagmus of the eyes, was hypersalivating, and appeared unable to get up. Supportive care was administered but the fox was found dead the next day. The carcass was submitted to CDFW Wildlife Investigations Laboratory (WIL) to determine cause of death.

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**RESULTS OF EXAMINATION**

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The fox carcass was kept frozen until necropsy. A necropsy was performed at the California Animal Health and Food Safety in Davis on May 18, 2018. It was found to be an adult female in average nutritional condition. No signs of injury were found. The digestive tract contained a small amount of unidentified yellow roughage material. There were no significant histological findings. Liver mineral values were within normal range. No parasites or unusual bacterial growth were detected. The rabies test was negative. Desmethylobromethalin, a toxic metabolite of bromethalin, was detected in adipose tissue.

Bromethalin is a neurotoxicant used as a rodenticide to control commensal rodents and moles. Animals intoxicated with bromethalin often display neurological signs such as disorientation. Given the presence of desmethylobromethalin in the adipose tissue and the neurological signs noted at intake, it is probable that the cause of death of this fox is bromethalin intoxication.

**WILDLIFE INVESTIGATIONS LABORATORY**



**Stella McMillin, Senior Environmental Scientist  
Wildlife Investigations Laboratory**

**Approved**



**Dr. Deana Clifford, Senior Wildlife Veterinarian,  
Wildlife Investigations Laboratory**

**Cc: Marilyn Palmer-Townsend,  
CDPR**

**David Kratville,  
CDFA**

**Robert Miller,  
USEPA**



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**Lab Number P-3285**  
**Necropsy Number Z18-0336**  
**CAHFS Number D1806525**

**Date of loss: April 11, 2018**  
**Sample: Gray fox**  
*Urocyon cinereoargenteus*  
**Protection status: No special status**

**To: Tony Linegar**  
**Sonoma County Agricultural Commissioner**

**Report Date: July 5, 2018**

**Remarks**

Loss of gray fox from probable bromethalin intoxication.

**Background**

On February 11, 2108, a gray fox was found in Santa Rosa appearing sick and was brought into the Sonoma County Wildlife Rescue. Upon admission, the fox was lying on its side with stiff legs. The fox died within the hour and the carcass was submitted to CDFW Wildlife Investigations Laboratory (WIL) to determine cause of death.

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**RESULTS OF EXAMINATION**

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The fox carcass was kept frozen until necropsy. A necropsy was performed at the California Animal Health and Food Safety Laboratory in Davis on May 15, 2018. It was found to be an adult female in emaciated condition with two fetuses. No signs of trauma were found. No parasites or unusual bacterial growth were found and liver minerals were within normal range. Strychnine and rabies tests were negative. Desmethylbromethalin, a toxic metabolite of bromethalin, was detected in adipose tissue.

Bromethalin is a neurotoxicant used as a rodenticide to control commensal rodents and moles. Animals intoxicated with bromethalin often display neurological signs such as disorientation. Given the presence of desmethylbromethalin in the adipose tissue and the neurological signs noted at intake, it is probable that the cause of death of this fox is bromethalin intoxication.

**WILDLIFE INVESTIGATIONS LABORATORY**

**Stella McMillin, Senior Environmental Scientist**  
**Wildlife Investigations Laboratory**

Approved

A handwritten signature in black ink, appearing to read "De Clifford". The signature is fluid and cursive, with a large initial "D" and a long, sweeping underline.

**Dr. Deana Clifford, Senior Wildlife Veterinarian,  
Wildlife Investigations Laboratory**

**Cc: Marilyn Palmer-Townsend,  
CDPR**

**David Kratville,  
CDFA**

**Robert Miller,  
USEPA**